42 Kuala Lumpur _Hackathon Asia 2024

22.3 million people

Total Addressable Market (TAM)

13.4 million people

Serviceable Available Market (SAM)

0.94 million people

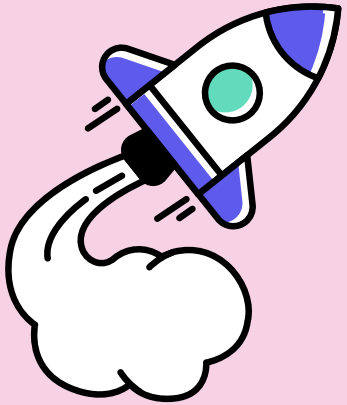
Serviceable Obtainable Market (SOM)

RM 25

Average Spending per delivery

RM 20 Million

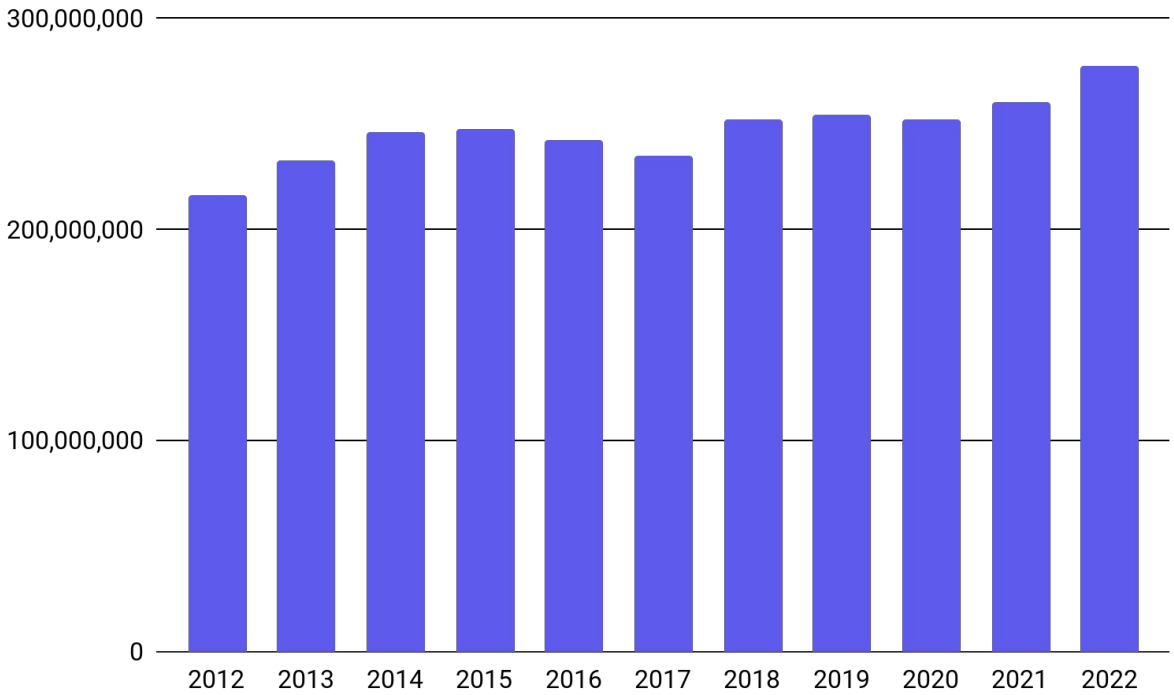
Potential Revenue (after rounding up)

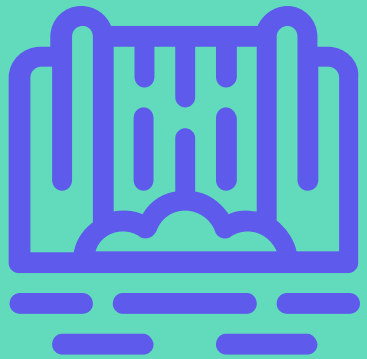


USD 4.8 MILLION

Wow thats big number!

Carbon Emission in Malaysia in 10 Years



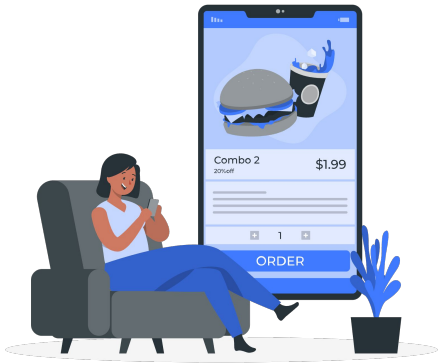


280 Million Tonne

You can feed a country with this much food.

CHALLENGES FACED IN FOOD DELIVERY INDUSTRY TO REDUCE CO2 EMISSION

CUSTOMER BEHAVIOUR



TRANSPORTATION EMISSION

Packaging Waste

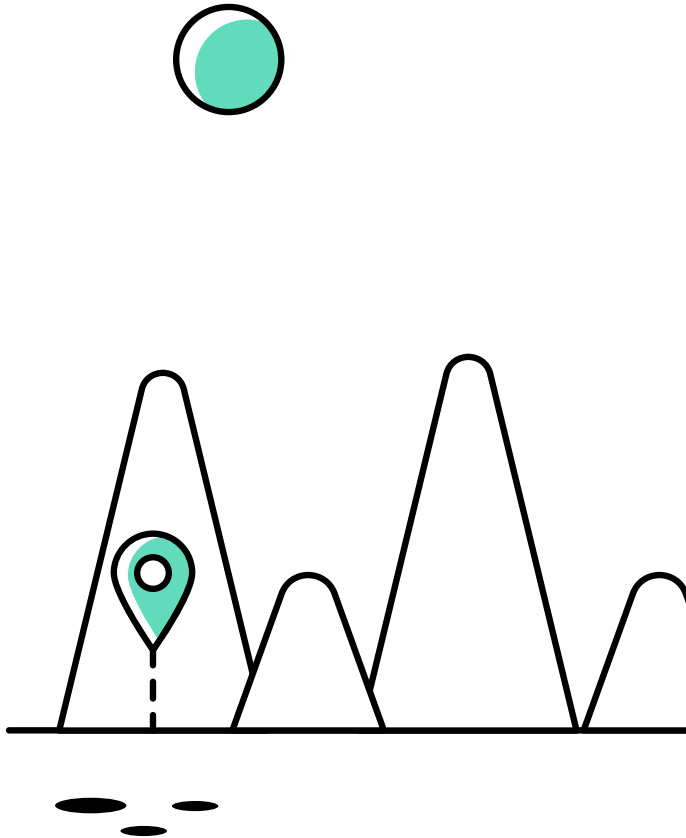
OBJECTIVES

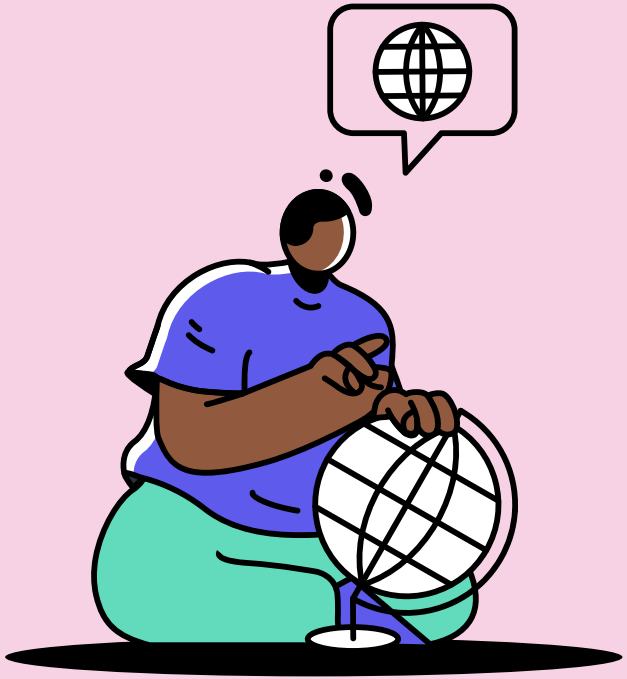
OUR AIM

To reduce packaging waste and transportation emissions in food delivery services by **promoting sustainable consumer choices** and **eco-friendly logistics**

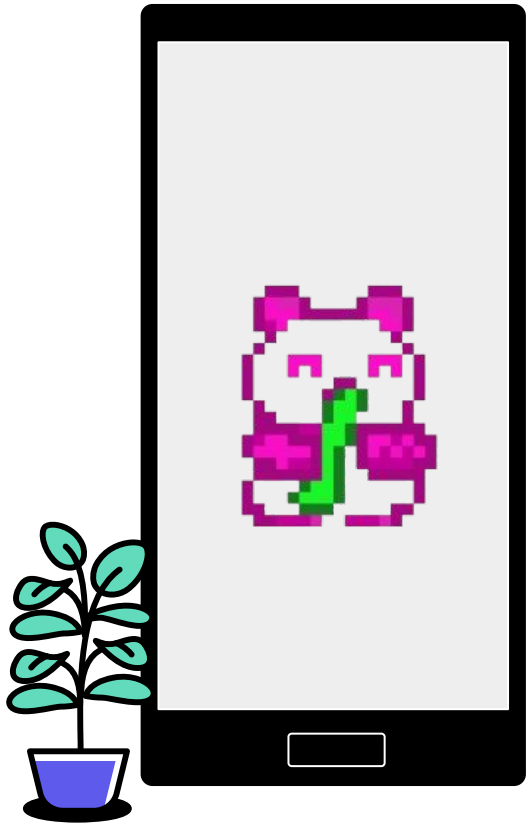
THE GOAL

Encourage the adoption of **greener packaging** and prioritize delivery options using **electric vehicles**, ultimately **reducing the carbon footprint** of food delivery systems



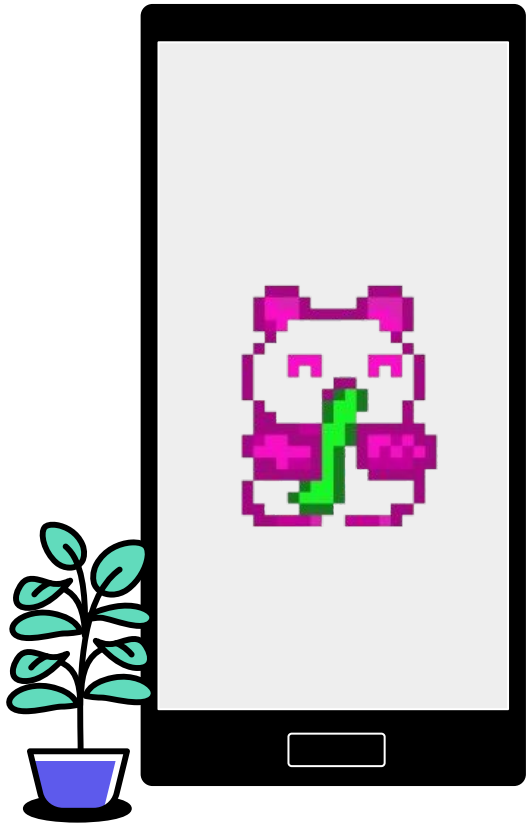


GAMIFYING _INITIATIVES & INCENTIVES



Poli

Your virtual companion on a greener journey, one bamboo at a time.



Encourage users to make eco-friendly choices

Welcome to ABC

Nasi Lemak

RM 10 — 0 +

Satay

RM 5 — 0 +

Roti Canai

RM 2

Delivery

Normal | Walker | E-bike | E-scooter

+ 1 points

Time

Now | Schedule

+ 1 points

Opt out

Cutlery

+ 1 points

2x Roti Canai	RM 5. 00
Delivery charge	RM 5. 00
Total:	**RM 10. 00**
Bamboo points	3 points

Checkout

miro

42KL

Statistic

Points
33

Contribution

0.04%

Carbon footprint reduction

Schedule order

8

Eco ride

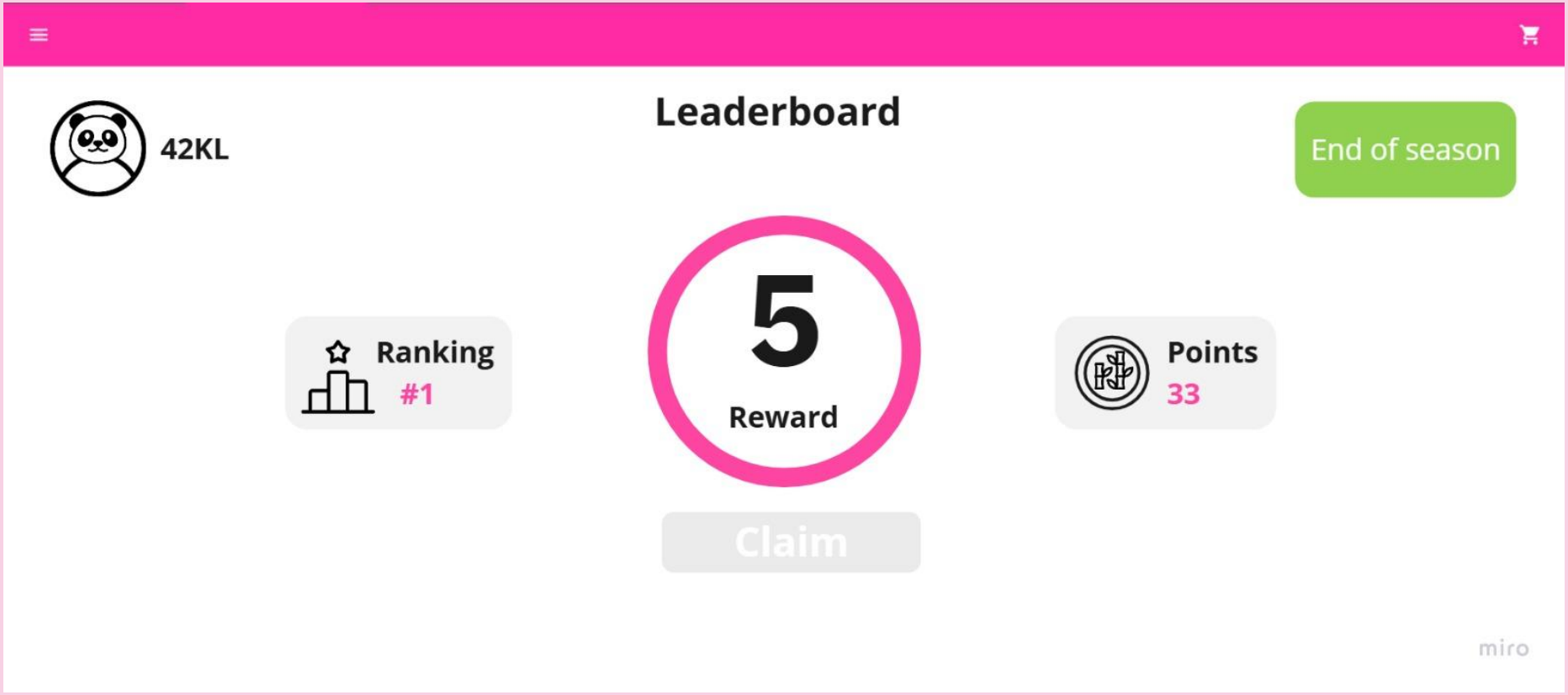
15

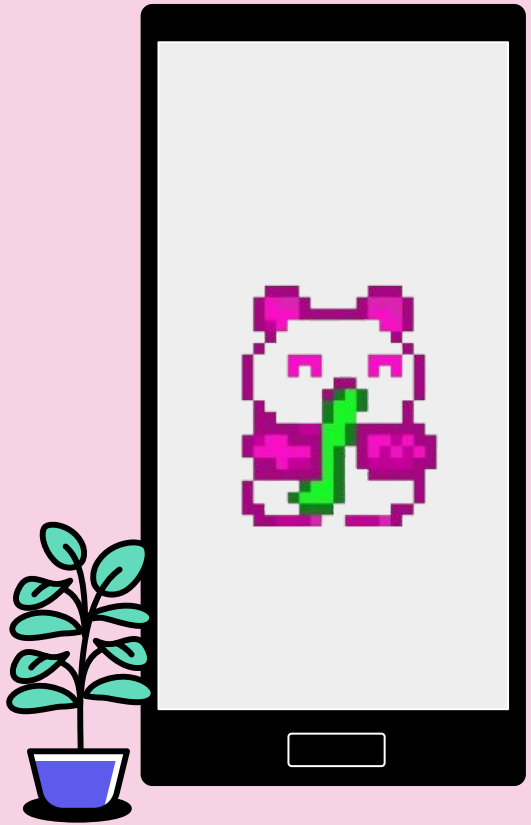
Vegan food

6

No cutlery

6


42KL
Leaderboard
End of season
Ranking
#1
5
Reward
Points
33
Claim
miro



Poli will also receive food to eat

- As Poli eats, it will grow, “Level up” and can provide additional rewards.

Tier based rewards*

ECOFRIENDLY DELIVERY METHOD

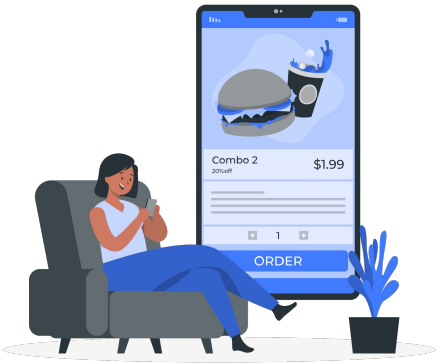
- Incentives for EV Riders & Walkers
- More incentive if they receive eco-friendly orders

ECOFRIENDLY PLASTIC BAG

- Collaborate with and incentivize vendors to adopt FoodPanda's biodegradable plastic bags.
- Opportunity to make **more revenue**

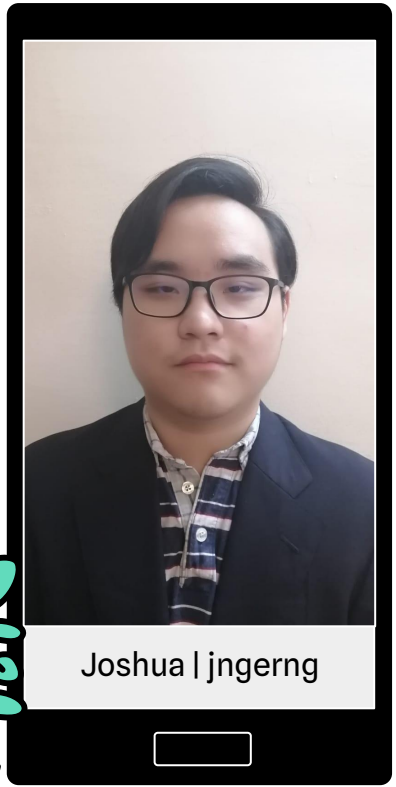
POSITIVE CHANGES WITH POLI

Increase in Ecofriendly Preference

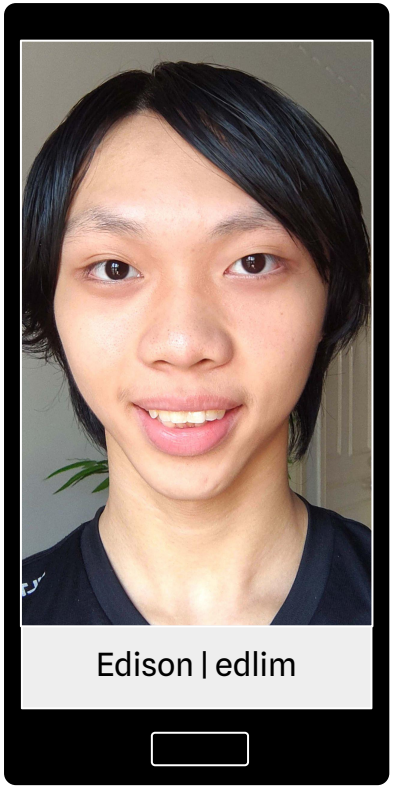


Increase Low-Emission Delivery

Reduction of Longterm Waste



Joshua | jngerng



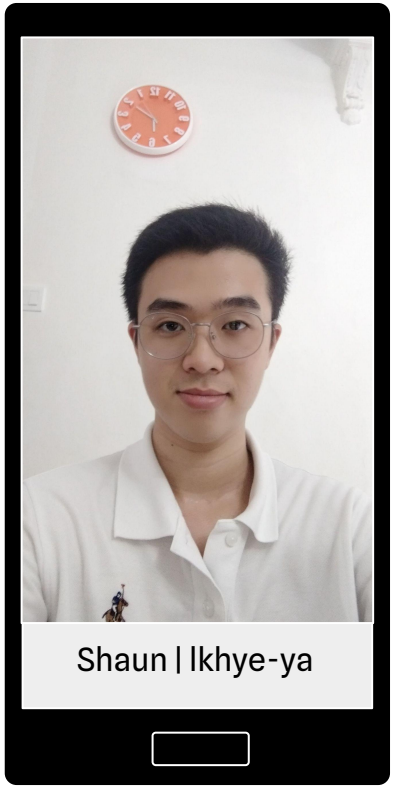
Edison | edlim

Alec | leng-chu

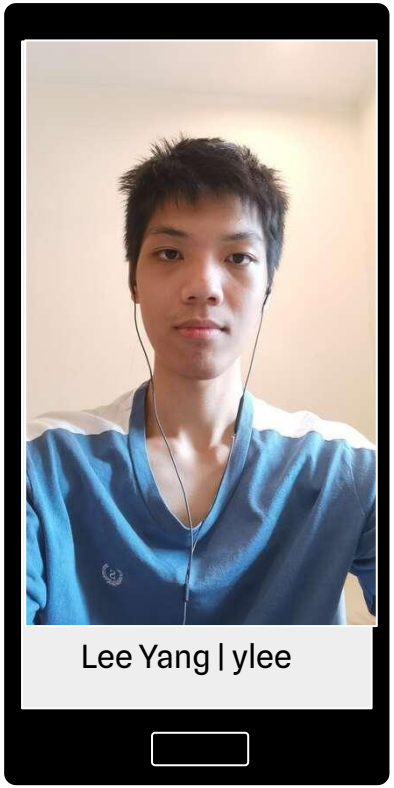
Rui Sheng | rng

Jason | jpaul

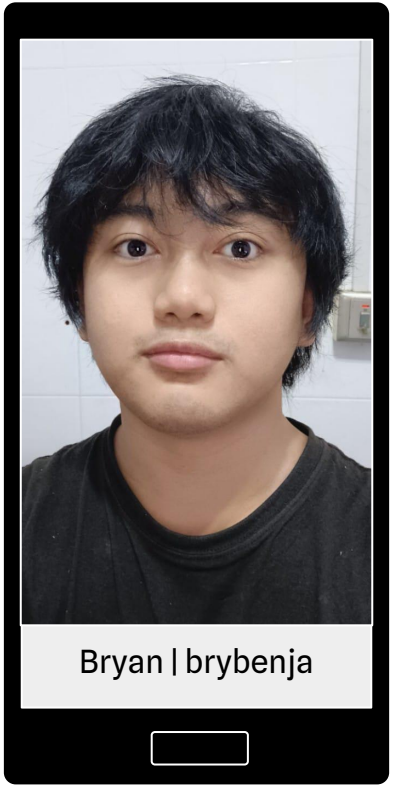
Wan | sbin-jef



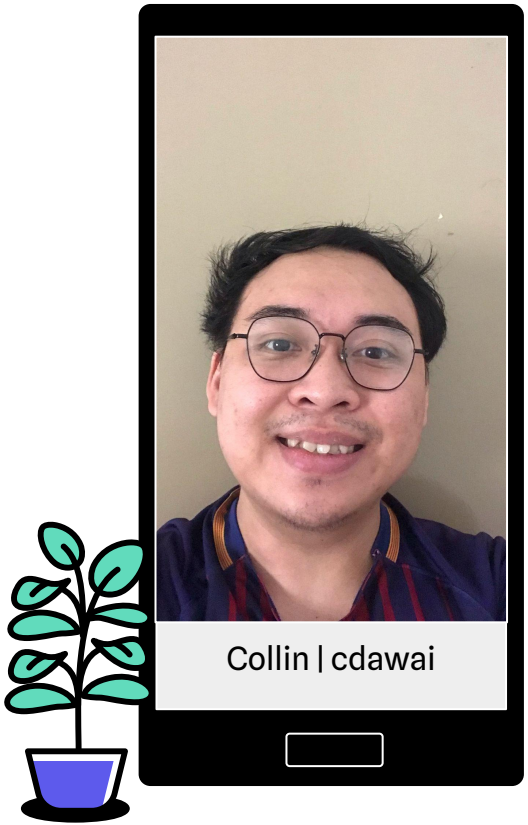
Shaun | lkhye-ya



Lee Yang | ylee

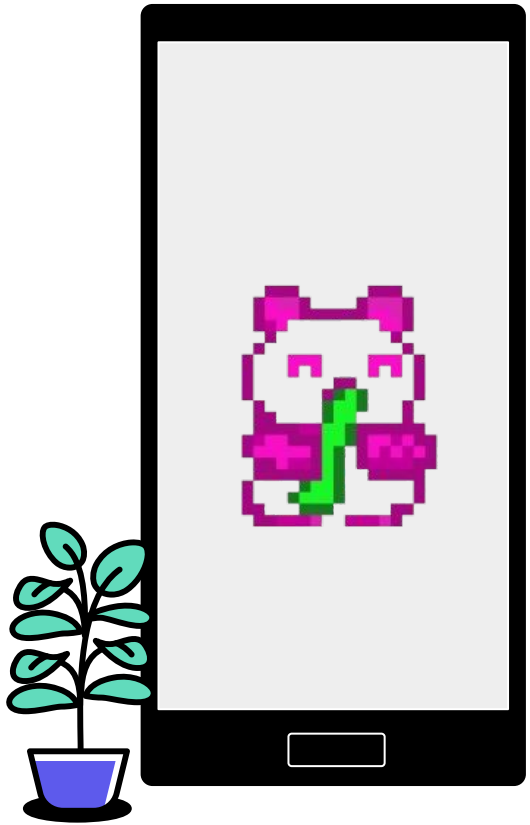


Bryan | brybenja

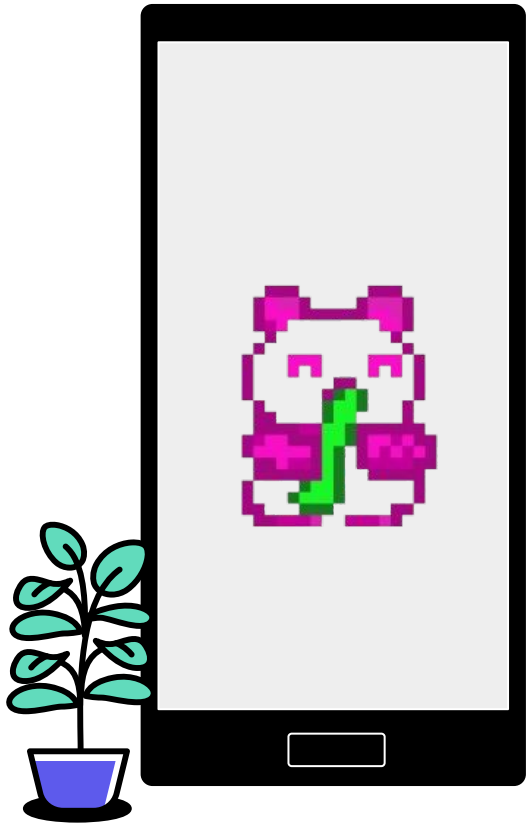


“To be Courageous in making new changes”

Thank You



Appendix

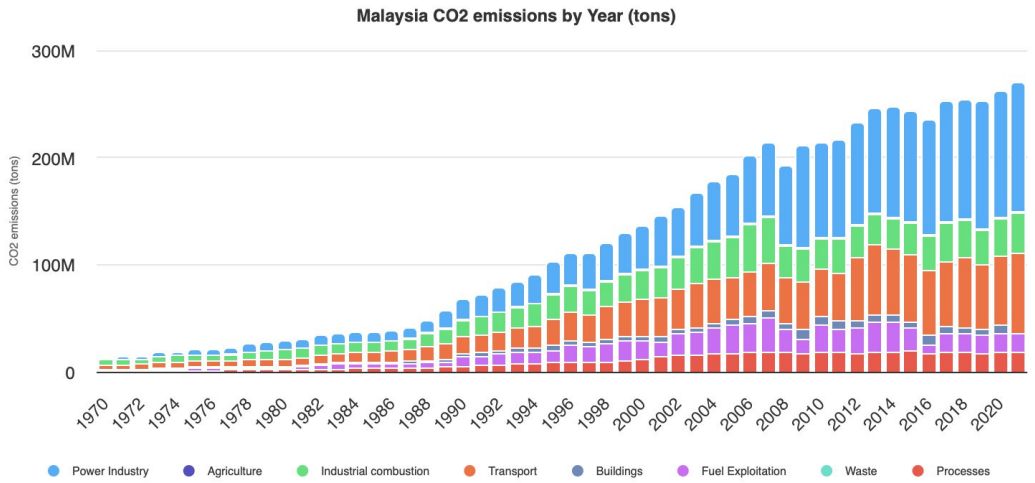


Appendix

Data on overall CO2 Emission

Malaysia CO2 Emissions

Fossil CO2 Emissions (2022)	Yearly Change	Global Share	Tons per capita
277,531,770 tons	+6.50%	**0.73%**	**8.00**



https://www.worldometers.info/co2-emissions/malaysia-co2-emissions/#

News on eMotorcycle Rebate

THE RISE OF ELECTRIC BIKES PROMPTS SPECULATION ABOUT WHETHER THEY REPRESENT THE FUTURE OF TRANSPORTATION. THEIR INCREASING POPULARITY, COUPLED WITH ADVANCEMENTS IN BATTERY TECHNOLOGY AND INFRASTRUCTURE, SUGGESTS THAT E-BIKES COULD INDEED PLAY A SIGNIFICANT ROLE IN SHAPING THE FUTURE OF URBAN MOBILITY.

By offering a sustainable alternative to traditional transportation methods and addressing concerns such as traffic congestion and air pollution, electric bikes have the potential to revolutionize urban commuting and recreational cycling alike.

Malaysia sees a rising trend in electric mobility, notably in the growing availability of electric motorcycles. The benefits of EV motorcycles are increasingly clear, aided by government support. In Budget 2024, an incentive scheme was launched to promote EV adoption. This signals a significant push towards a sustainable transportation scheme that offers the public a **substantial rebate of up to RM2,400** upon purchasing an electric motorcycle. Eligibility for this rebate extends to individuals earning less than RM120,000 annually or less than RM10,000 monthly.

https://imotorbike.my/news/2024/05/revving-towards-the-future-malaysias-electric-motorcycle-movement/

Cost of eBikes

The average price for e-bikes in Malaysia can vary widely based on factors such as brand, specifications, and features. However, as of recent data:

Entry-Level E-Bikes: Typically range from RM 1,500 to RM 3,000.
Mid-Range E-Bikes: Generally priced between RM 3,000 to RM 6,000.
High-End E-Bikes: Can go from RM 6,000 to RM 10,000 or more, depending on advanced features and technology.

https://www.usjcycles.com/bicycles-online/e-bikes/

Proposed calculation for plastic bag incentives

Assuming in Malaysia food panda takes 30%, food panda can take 20% instead and restaurant gets more.

EG: for RM 20 meal, Restaurant takes RM16 (80%) and Food Panda takes RM4 (20%); excluding delivery cost.

User opting for the plastic bag, food panda may charge RM 0.20 to RM0.50 as it cost about RM 0.15

https://www.helipro.com.my/biodegradable-plastic-bag/

Ensuring restaurant uses the plastic bag

Since riders are required to take pictures as proof of pickup, rider can also verify that if vendor also used the provided plastic bag, in condition that users ordered the ecoplastic option. Vendors can be penalised for failing to do so.

Users could also verify upon receiving, therefore both vendor and driver are eligible for penalty

Making revenue from plastic bag ad

Food panda can set a certain amount for other party to pay in order to advertise along side food panda for limited number of time

Since food panda have full control, they can experiment the best design to attract users and also create a seasonal festive design. They can also set a higher price during these festive seasons.

Target Audience

Environmentally conscious users:

- Wary of how they spend & what they do and contribute.

Competitive users:

- Have excess money and is willing to spend and wants to get more point for the sake of “green” accomplishment.

Interested but unsure

- May be interested but unsure where to start.
- Interested and willing to commit but does not have the resources or time to contribute to lesser carbon due to a busy life style

What can the bamboo point be redeemed for?

For users:

- Redeem more voucher
- Redeem eco friendly product (eg Limited edition reusable food containers)
- Convert bamboo to original panda point (but not panda point to bamboo)

For deliverers (eRiders & walkers):

- Sport Shoe discounts/vouchers
- Vouchers for EV charging

A way to compliment, not replace, Food Panda's reward system

While current reward system can exist and still function as usual, bamboo point will specifically focus and be rewarded for eco friendlier options.

In fact, bamboo point can encourage environmentally concious & competitive users to buy subscription where it provide benefits like:

- Cheaper cost of eco plastic
- Increased amount of bamboo received (1.5x)
- Panda grow faster

Comparison of Gasoline Vehicle vs EV

Lifetime Emissions

- **ICEVs**: Over their entire lifecycle, ICEVs typically have higher emissions due to continuous fuel combustion.
- **EVs**: Despite higher initial emissions from production, EVs generally have lower lifetime emissions. Studies show that EVs contribute fewer GHG emissions over their entire lifecycle compared to gasoline-powered cars2.

Air Quality and Health

- **ICEVs**: Emit pollutants that contribute to smog and respiratory problems.
- **EVs**: Help improve air quality by eliminating tailpipe emissions, which is particularly beneficial in urban areas.

Energy Efficiency

- **ICEVs**: Less efficient, with a significant amount of energy lost as heat.
- **EVs**: More efficient, converting a higher percentage of energy from the battery to power the vehicle.

Comparison of Gasoline Vehicle vs EV

Production Phase

- **ICEVs**: Manufacturing traditional vehicles involves emissions from producing steel, aluminum, and other materials. However, the production process is generally less carbon-intensive than that of EVs.
- **EVs**: The production of EVs, particularly their batteries, is more carbon-intensive due to the extraction and processing of materials like lithium, cobalt, and nickel. This can result in up to 80% more emissions during manufacturing compared to ICEVs1.

Operational Phase

- **ICEVs**: These vehicles emit greenhouse gases (GHGs) directly from their tailpipes, including carbon dioxide (CO_2), nitrogen oxides (NOx), and particulate matter (PM). The average gasoline car emits more than 350 grams of CO_2 per mile driven1.
- **EVs**: EVs produce no tailpipe emissions. However, the emissions associated with charging them depend on the energy mix of the electricity grid. In regions with a high share of renewable energy, EVs have a much lower carbon footprint. On average, EVs emit about 200 grams of CO_2 per mile driven, considering the current energy mix1.

https://www.helipro.com.my/biodegradable-plastic-bag/
https://www.epa.gov/greenvehicles/comparison-your-car-vs-electric-vehicle